

WHAT IS CLAIMED IS:

1. A method of synchronizing contents, wherein contents are provided by a source device, synch data corresponding to the contents are interpreted, and an action command is issued to a target device if conditions for execution of the contents are fulfilled.
2. The method as set forth in claim 1, the method comprising:
providing a content device located at a first location with the contents by the source device;
storing the synch data required to synchronize the provided contents;
determining the target device and conditions for execution of the contents by interpreting the synch data; and
executing the contents through the target device if the conditions are satisfied.
3. The method as set forth in claim 2, further comprising a user moving the content device to a second location after downloading the contents from the source device.
4. The method as set forth in claim 2, wherein the step of storing the synch data comprises:
receiving information required to construct the synch data from an external source;
and
a data composer constructing the synch data using the received information.

5. The method as set forth in claim 4, wherein the step of receiving the information further comprises receiving the information directly from the user through a user interface.

6. The method as set forth in claim 4, wherein the step of receiving the information further comprises receiving the information from an external server.

7. The method as set forth in claim 4, wherein the step of receiving the information further comprises receiving the information using results obtained by interpreting a pattern of actions performed between the content device and the target device.

8. The method as set forth in claim 2, wherein the step of determining the target device comprises:

searching for devices capable of supporting a service consistent with the contents;
and
selecting the device from the searched devices.

9. The method as set forth in claim 8, further comprising determining remaining ones of the devices, which are not selected as the target device, for alternative devices.

10. The method as set forth in claim 8, wherein the step of searching for the devices comprises:

interpreting the synch data through a data parser; and

searching for the devices capable of supporting corresponding protocol and service based upon the interpreted synch data through a service finder.

11. The method as set forth in claim 8, wherein the step of selecting the target device comprises:

interpreting the synch data through the data parser; and

selecting the target device from the searched devices based upon the interpreted synch data through the device selector.

12. The method as set forth in claim 2, wherein the step of executing the contents comprises:

a data parser interpreting the synch data;

a sync handler determining conditions for execution of the contents using the interpreted synch data;

the sync handler transmitting the determined conditions for execution of the contents to a content processor; and

the content processor executing the contents through a service manager.

13. The method as set forth in claim 12, wherein the step of determining the conditions for execution of the contents comprises:

receiving the interpreted synch data from the data parser;

receiving the received synch data and determining a time when the contents are executed;

receiving the received synch data and determining the conditions for execution of the contents; and

issuing a start command to a content processor if the time and conditions are fulfilled.

14. The method as set forth in claim 12, wherein the step of executing the contents comprises:

receiving the interpreted synch data from the data parser;

constructing an action message using the interpreted synch data; and

transmitting the action message to the target device using the service manager.

15. The method as set forth in claim 14, wherein the step of executing the contents further comprises:

analyzing preferences regarding a device, a service and a content format by analyzing the constructed action message; and

recording information on the analyzed preferences and returning the analyzed preferences to the data parser.

16. A content device comprising:

a data composer operable to receive information required to construct synch data from an external source and construct the synch data;

a data parser operable to interpret the synch data and transmit a user command to modules requiring the interpreted synch data;

a sync handler operable to determine conditions for execution of the contents using the interpreted synch data; and

a content processor operable to issue an action command to the target device through a service manager if the conditions are fulfilled.

17. A content device as set forth in claim 16, wherein contents are provided thereto by a source device, synch data corresponding to the contents are interpreted, and an action command is issued to a target device if conditions for execution of the contents are fulfilled.

18. The content device as set forth in claim 17, further comprising:
a device finder operable to search for devices capable of supporting a corresponding protocol; and
a device selector operable to select one or more of the devices found by said device finder.

19. The content device as set forth in claim 17, further comprising a data storage operable to store the synch data.

20. The content device as set forth in claim 17, wherein the data composer comprises:

a user command reader operable to construct the synch data by interpreting information received through a user interface;

an external data reader operable to interpret information provided by an external server and constructing the synch data; and

a reference manager operable to interpret information, which is obtained by analyzing a pattern of actions between the content device and the target device, provided by the content processor and updating the synch data.

21. The content device as set forth in claim 17, wherein the sync handler comprises:

a data reader operable to receive the interpreted synch data from the data parser;
a time scheduler operable to receive the received synch data and determine a time when the contents are executed;

a condition check operable to receive the received synch data and determine conditions for execution of the contents; and

a sync starter operable to issue the action command to the content processor if the time and conditions are fulfilled.

22. The content device as set forth in claim 17, wherein the content processor comprises:

a data reader operable to receive the interpreted synch data from the data parser;
a message maker operable to construct an action message using the interpreted synch data; and

an action starter operable to transmit the action message to the target device through the service manager.

23. The content device as set forth in claim 22, wherein the content processor further comprises:

a preference analyzer operable to analyze preferences regarding a device, a service and a content format by analyzing the constructed action message.

24. A system for synchronizing contents, comprising:

a source device operable to provide contents desired by a user;

a content device operable to receive the contents from the source device and control the target device to automatically execute the contents; and

a target device operable to receive the contents desired by the user and execute the contents.

25. The system as set forth in claim 24, wherein the content device comprises:

a data composer operable to receive information required to construct synch data from an outside and construct the synch data;

a data parser operable to interpret the synch data and transmit a user command to modules requiring the interpreted synch data;

a sync handler operable to determine conditions for execution of the contents using the interpreted synch data; and

a content processor operable to issue an action command to the target device through a service manager if the conditions are fulfilled.

26. The system as set forth in claim 24, further comprising a device finder operable to locate one or more devices and a device selector operable to select at least one of the found devices.

27. The system as set forth in claim 24, further comprising a data storage operable to store the synch data.

28. The system as set forth in claim 24, wherein the data composer comprises:
a user command reader operable to construct the synch data by interpreting information received through a user interface;

an external data reader operable to interpret information provided by an external server and construct the synch data; and

a reference manager operable to interpret information, which is obtained by analyzing a pattern of actions between the content device and the target device, provided by the content processor and update the synch data.

29. The system as set forth in claim 24, wherein the sync handler comprises:
a data reader operable to receive the interpreted synch data from the data parser;
a time scheduler operable to receive the received synch data and determine a time when the contents are executed;

a condition check operable to receive the received synch data and determine conditions for execution of the contents; and

a sync starter operable to issue the action command to the content processor if the time and conditions are fulfilled.

30. The system as set forth in claim 24, wherein the content processor comprises:

a data reader operable to receive the interpreted synch data from the data parser;

a message maker operable to construct an action message using the interpreted synch data; and

an action starter operable to transmit the action message to the target device through the service manager.

31. The system as set forth in claim 24, wherein the content processor further comprises:

a preference analyzer operable to analyze preferences regarding a device, a service and a content format by analyzing the constructed action message.

32. A synch data structure operable to store information required to allow a target device to execute contents at a certain time without intervention of a user, comprising:

SynchTime operable to define a time at which contents stored in a content device are executed in a target device;

SynchAction operable to define actions that are required to allow the content device to execute the contents in the target device;

ContentInfo operable to define kinds of contents;

PreferenceInfo operable to define basic information of an owner if the owner of the contents exists; and

SelectDeviceInfo operable to define a certain criterion to select a certain device if a plurality of devices providing the corresponding service exist at a time of synchronization.

33. The synch data structure as set forth in claim 32, wherein the SynchTime comprises:

TriggerPoint operable to define a time when synchronization is performed;

ValidTime operable to define an effective period for which the synchronization can be performed; and

MaxCount operable to define a maximum number of times the synchronization is performed.

34. The synch data structure as set forth in claim 32, wherein the SynchAction comprises:

ProtocolInfo operable to define a protocol by which synchronization is performed;

ServiceInfo operable to define a service that performs the action; and

ConFIGInfo operable to define definition so that the action is transmitted using information previously set by the user.

35. The synch data structure as set forth in claim 32, wherein the ContentInfo comprises:

Type operable to define types of the contents;

Source operable to define a position and a file name where and with which the contents are stored;

ProtocolInfo operable to define a protocol by which synchronization is performed;
and

ServiceInfo operable to define a service that performs the action.

36. The synch data structure as set forth in claim 32, wherein the ReferenceInfo comprises:

UserInfo operable to define the basic information of the owner;

FavoriteInfo operable to define information of a device, a service and a content format preferred by the user; and

ConFIGInfo operable to previously set preference information of the user at a time of the synchronization.

37. The synch data structure as set forth in claim 32, wherein the SelectDeviceInfo comprises:

SpecificDevice operable to make a definition to previously designate a device that is operated by the user; and

AnyDevice operable to define a method to select a certain device if there is no device designated by the user.

38. A recording medium, wherein the synch data structure of any one of claims 32 to 37 is stored in a computer-readable format.